

What is claimed is:

1. A method for graphically representing values of data types of a formally defined data structure existing as a value tree, wherein

- a window is assigned as a graphical user interface to the data structure;
- generic, scalable, graphical user-interface components are inserted hierarchically in the window, the value tree of the data structure being mapped onto the user-interface components;
- the graphical user interface components are in a relation to the nodes of the value tree that is recognizable to the user; and
- a graphical or textual representation of the value is selectable for each subtree of the value tree.

2. The method as recited in Claim 1, wherein, for a processing of the value tree, a list of all values which are compatible with respect to assignment with the represented data type is derived for each node, and one value is selected from the list for each value assignment.

3. The method as recited in Claim 2, wherein, when compiling value lists, the number of values to be accepted in the list is restricted in accordance with predefined rules, depending on the current context.

4. The method as recited in one of the preceding claims, wherein a visualization of the window is first undertaken at the time of an initialization of the graphical user interface and, after that, data, in particular value lists, are initialized, which are derived for a processing.

5. The method as recited in one of the preceding claims, wherein the value to be represented is transferred in a transfer syntax which contains all necessary information for the representation with respect to the data type and the value assignment.

6. The method as recited in one of the preceding claims, wherein data types, whose exact type assignment can first be determined at the execution time in accordance with the late binding principle, are inserted as a dynamically changeable subtree in the value tree represented by the graphical user interface.

7. The method as recited by one of the preceding claims, wherein for data types whose exact type assignment is first defined in accordance with the late binding principle at the execution time by the marking of another node (for example, "ANY DEFINED BY" in the description language ASN.1), the user is prompted to input whether the assignment should be carried out automatically or following a manual input.

8. The method as recited by one of the preceding claims, wherein values can be transferred from one subtree into another by intermediately storing and clicking on the subtree in question.

9. The method as recited in one of the preceding claims, wherein the method is implemented by one or more program modules that can be integrated in the application programs.

10. The method as recited in one of the preceding claims, wherein additional information to be displayed can be stored for each node of the value tree which can be uniquely named by the displayed type and the relation to the higher-level type.

11. The method as recited in one of the preceding claims, wherein it is continually checked during inputting of a value

to determine whether the input value is permissible for the corresponding data type, and whether the input value is identical to the currently active value of the data type, and the result is made known to the user.

12. The method as recited in one of the preceding claims, wherein the display format can be altered already at the time that a value is input and, thus, for example, a numerical value is either displayed as a decimal or binary value, before a value is accepted into the value tree.

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